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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/395,294	09/13/1999	SOPHIE WILSON	1073/OG117	5796

26111 7590 10/19/2004

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EXAMINER	
MEONSKE, TONIA L	

ART UNIT	PAPER NUMBER
2183	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/395,294	WILSON, SOPHIE	
	Examiner	Art Unit	
	Tonia L Meonske	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17, 18, 19, 20, 24, 25 are rejected under 35 U.S.C. 102(b) as being clearly anticiapted by Shiell et al., US Patent 6,317,820, cited in the prior office action, paper number 6, mailed on January 15, 2002.

3. The rejections are respectfully maintained and incorporated by reference as set forth in the last office action, mailed on April 16, 2004.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 21, 22, 23, 26, 27, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiell et al., US Patent 6,317,820, cited in the prior office action, paper number 6, mailed on January 15, 2002, in view of Yoshida, US Patent 5, 761,470, cited in a prior office action, paper number 16, mailed on April 3, 2003.

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiell et al., US Patent 6,317,820, cited in the prior office action, paper number 6, mailed on January 15, 2002, in view of Panesar, US Patent 6,697,774.

7. Claims 29, 30, 31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiell et al., US Patent 6,317,820, cited in the prior office action, paper number 6, mailed on January 15, 2002, in view of Yoshida, US Patent 5, 761,470, cited in a prior office action, paper number 16, mailed on April 3, 2003, and Panesar, US Patent 6,697,774.

8. The rejections are respectfully maintained and incorporated by reference as set forth in the last office action, mailed on April 16, 2004.

Response to Arguments

9. Applicant's arguments filed July 16, 2004 have been fully considered but they are not persuasive.

10. On page 9, Applicant argues in essence:

> *"Nothing in the cited material suggests that an instruction of the VLIW received during an instruction fetch can define a single operation or two independent operations."*
>
> However, Shiell et al. have in fact taught an instruction of a VLIW (abstract, column 3, lines 50-67, The processor is a VLIW that processes VLIW instructions.) received during an instruction fetch (column 4, lines 1-5) can define a single operation or two independent operations (column 2, lines 52-56, The VLIW instructions can change the processor from the first mode (the execution of a single operation), or the second mode. (the execution of two independent operations)). Therefore this argument is moot.

11. On page 9, Applicant argues in essence:

> *"Nothing in the cited material suggests a decode unit that is operable to determine whether the instruction (of the VLIW received during the instruction fetch) defines a*

single operation or two independent operations..., as set forth in independent claim 17, as amended."

However, in order for an instruction to be executed, the instruction must be decoded in order to determine the correct operation of the instruction. In the case of Shiell et al., when the VLIW instruction is decoded (column 3, line 50-column 4, line 24), the processor, or more specifically the decoder, determines the correct mode of the instruction (column 2, lines 52-56). Shiell et al. have in fact taught a decode unit (column 4, lines 1-24) that is operable to determine whether the instruction defines a single operation or two independent operations (column 2, lines 23-56). Therefore this argument is moot.

12. On page 10, Applicant argues in essence:

"Shiell and/or Yoshida, alone or in combination, fail to teach or suggest decoding each instruction of the VLIW, wherein decoding each instruction includes reading the identification bit of each instruction to determine whether the instruction defines a single operation or two independent operations."

However, Shiell et al. in combination with Yoshida have taught decoding each instruction of the VLIW, wherein decoding each instruction includes reading the identification bit of each instruction to determine whether the instruction defines a single operation or two independent operations. Shiell et al. have taught decoding each instruction of the VLIW (column 3, line 50-column 4, line 24), and an instruction identifying whether an instruction defines a single operation or two independent operations (column 2, lines 23-56). Shiell et al. have not specifically taught wherein decoding each instruction includes reading the identification bit (at at least one predetermined bit location in the instruction) of each instruction to determine whether the instruction defines a single operation or two

independent operations. However, Yoshida has taught decoding each instruction including reading the identification bit at at least one predetermined bit location in the instruction of each instruction to determine whether the instruction defines a single operation or two independent operations (Figure 25, elements 505 and 506). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the decoding of Shiell et al. include reading the identification bit (Figure 25, elements 505 and 506) of each instruction to determine whether the instruction defines a single operation or two independent operations, as taught by Yoshida, for the desirable purpose of easily determining whether the bit length defines a single operation or two independent operations. Having the designated bits at predetermined bit locations in the instruction itself would eliminate the need to have a separate instruction (Shiell et al., column 2, lines 53-55) preceding the instruction in order to set up the channels for execution. Therefore this argument is moot.

13. On page 11, Applicant argues in essence:

"Panesar describes a modeling tool for use in defining an application specific processor (ASP). Panesar has nothing to do with determining whether an instruction of a VLIW defines a single operation or two independent operations. Thus, Panesar fails to remedy the failure of Shiell to teach or suggest that the commands to enable the processor-based system to process the very long instruction word data include commands to enable the processor-based system to decode an instruction of the VLIW received during a instruction fetch to determine whether the instruction defines a single operation or two independent operations."

However, the fact that Panesar may have nothing to do with "determining whether an instruction of a VLIW defines a singe operation or two independent operations" is irrelevant because Panesar has been cited for teaching the simulation of a processor with commands such as VHDL (Panesar, column 8, lines 25-36). This simulation of the

processor with commands is necessary prior to implementing a circuit in silicon in order to establish how a device will actually operate (Panesar, column 8, lines 25-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system of Shiell et al. with commands, as taught by Panesar, as it is necessary prior to implementing a circuit in silicon for the desirable purpose of determining how the processor will operate (Panesar, column 8, lines 25-36). Therefore this argument is moot.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday, 8-4:30.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie P Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

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